

To: Distribution  
From: Bob Hunnicutt, Tower Coordinator, Columbia  
Telecommunications

A meeting of the Telecommunications Transmission Facility  
Coordinating Group (TTF CG) was held on November 14, 2001. The  
following people were in attendance:

MEMBERS

Jane Lawton OCA (240) 777-3724  
Michael Ma M-NCPPC (301) 495-4595  
Pat Hanehan MCPS (301) 279-3609  
Rey Junquera DFS (240) 777-6086  
Eric Carzon DBM (240) 777-2763  
Tracey Williams WSSC (301) 206-7171  
Dave Niblock DPS (240) 777-6252

STAFF

Amy Rowan OCA (240) 777-3684  
Marjorie Williams OCA (240) 777-3762  
Robert Hunnicutt CTC (410) 964-5700  
Julie Modlin CTC (410) 964-5700  
Lee Afflerbach CTC (410) 964-5700

OTHER ATTENDEES

Lee Jarmon Nextel (410) 953-7440 (FAX) 953-7406  
Bill O'Brien VoiceStream (443) 570-1032  
Steve Weber VoiceStream (571) 277-0235  
Ryan C VoiceStream  
Carolyn Mitchell Cingular Wireless  
Jim Michal Jackson, Campbell (202) 457-1600  
Janet Brown Jackson, Campbell (202) 457-1600  
Susan Singer-Bart Gazette Newspapers (301) 670-2069  
Karl Nelson Saul Ewing  
Jennifer Tabeling Cingular (410) 712-7835  
Jamie Stepowany Crown Castle  
M.G. Diamond Counsel for Verizon  
Mike Winberg Resident (301) 216-9690  
Don Taylor Sprint PCS (202) 270-2150  
Tim Boyce Sprint PCS  
John Dimeck Sprint PCS (201) 684-4141  
George Hughes MPT (410) 581-4024  
Melvyn Lieberman Lieberman, Walisko (301) 681-9889

OTHER ATTENDEES (cont.)

Robert Sestili MPT (410) 581-4297  
Gerrit Veenhof MD-DBM (410) 767-6501  
Craig Fetzer MD-DOT/SHA (410) 747-8590  
Bob Rosenbush MD-Dept. Planning (410) 767-4487  
Kirby Storms MPT (410) 581-4234  
Steven Schaffer for MPT (202) 833-1700

Action Item: Approval of October 10, 2001 minutes: Pat Hanehan  
moved the minutes be approved as written. Rey Junquera  
seconded and the minutes were approved.

Consent Agenda Item:

Jane Lawton requested that items #1 and #2 be removed as consent agenda items so they may be discussed.

3. Sprint PCS application to attach 9 antennas at the 141' level of the WSSC Hampshire Greens water tank located at 15916 New Hampshire Avenue in Spencerville (Application #200110-03).

4. Sprint PCS application to attach 9 antennas at the 33' level of the WSSC Cedar Heights water tank located at 24215 Ridge Road in Damascus (Application #200110-04).

5. VoiceStream Wireless application to replace 6) existing antennas with 6) new antennas at the same 160' level of the WSSC Glenmont water tank located at 12405 Georgia Avenue in Silver Spring (Application #200110-06).

6. VoiceStream Wireless application to replace 6) existing antennas with 6) new antennas at the same 141' level of a 150' monopole located at Fire Station #31 at 12100 Darnestown Road in Gaithersburg (Application #200110-07).

7. VoiceStream Wireless application to replace 6) existing antennas with 6) new antennas at the same 193' level of a 190' monopole at the Gate of Heaven Cemetery located at 13801 Georgia Avenue in Silver Spring (Application #200110-08).

8. VoiceStream Wireless application to replace 6) existing antennas with 6) new antennas flush mounted on the penthouse walls at the same 201' level of the Democracy Center building located at 6903 Rockledge Drive in Bethesda (Application #200110-10).

Motion: Eric Carzon moved that the remaining consent agenda items #3-8 be recommended. Michael Ma seconded the motion and it was unanimously approved.

Action Item:

1. Nextel Communications application to mount 12 antennas on the penthouse walls at approximately 60' on an existing 54' building located at The Meadows at 12501 Prosperity Drive in Silver Spring (Application #200110-01).

Julie Modlin summarized the application. Jane Lawton asked if there were other antennas at the site and if the Nextel antennas would be above the roof. She also asked why Nextel did not attach to the other nearby antenna structures.

Bob Hunnicutt explained that the antennas would be wall mounted on the penthouse and would not be very noticeable. Lee Jarmon explained that of the other nearby sites, the WSSC tower was too far away and access to the other two locations could not be obtained from the property/tower owners.

Motion: Eric Carzon moved the application be recommended. Rey Junquera seconded the motion and it was unanimously approved.

Action Item:

2. Sprint PCS application to attach 9 antennas on the roof at the 51' level on an existing Sligo House Apartment building located at 601 Sligo Avenue in Silver Spring (Application #200110-02).

Julie Modlin summarized the application. Bob Hunnicutt added that these antennas would be sled mounted and would rise above the roof but the view from the nearby residences would be obscured because of the surrounding trees.

Motion: Eric Carzon moved the application be recommended. Dave Niblock seconded the motion and it was unanimously approved.

Action Item: Sprint PCS application to attach 9 antennas at the 130' level of an existing 250' lattice tower on the Easterday property located at 9265 Brown Church Road in Mt. Airy (Application #200110-05).

Julie Modlin summarized the application and noted that it was conditioned on the carrier making the recommended structural improvements to the facility prior to attaching its antennas.

Jane Lawton asked who was going to pay for the structural improvements. Jim Michal explained that Sprint would pay for the strengthening of the steel members to provide additional support to accommodate Sprint's antennas. In response to questions, he added that Mr. Easterday owns the property. Mr. Michal also noted that this tower was not originally constructed for the weight of a large cellular array. That was why the recommendation was conditioned on the improvement of the structure, as was the prior application from Nextel at this site.

Jane Lawton asked if this tower was originally authorized by a Special Exception. Bob Hunnicutt explained that this was a very old tower and he was unable to find a Special Exception record for this tower. Julie Modlin noted that the structural analysis stated that the tower was first erected in 1977.

Motion: Dave Niblock moved the application be recommended conditioned on Sprint making the structural modifications noted in the structural analysis. Eric Carzon seconded the motion and it was unanimously approved.

Action Item: VoiceStream Wireless application to replace 2) existing antennas with 1) new antenna at the same 64' level of an existing 61' wooden PEPCO Pole #7771406 located at 4500 Western Avenue in Bethesda (Application #200110-09).

Julie Modlin summarized the application and explained that VoiceStream is replacing two omni-directional antennas with one directional antenna. She also noted that this location served a very small service area.

Bill O'Brien explained that VoiceStream had one other site in Baltimore that was like this one. He stated VoiceStream was unsure what the coverage area would be, but explained that there were no other options in this area, where it is difficult to place antennas. He noted that this antenna change was to provide in-fill coverage for this area. The VoiceStream engineer stated that the

existing Sprint omni-directional antennas covered 360° around this site, whereas the replacement VoiceStream antenna covers three sectors with the single new antenna. Jane Lawton asked if this was like a microcell. Julie Modlin explained that this was a small cell but it was limited in the number of radios that it could handle at that site. Bob Hunnicutt said that there are other stealth applications in church steeples nearby, noting the AT&T antennas at the Westmoreland Church and the Nextel site two blocks away at the Baptist Church on Massachusetts Avenue.

Jane Lawton commended the use of the PEPCO pole and asked about camouflage around the equipment shelter. Bob Hunnicutt explained that the only area that was not screened was the section facing the PEPCO substation designed to look like a single-family residence.

Eric Carzon asked what equipment would be added at the base of the pole. Bill O'Brien explained that an additional cabinet would be located on a platform at the base of the pole.

Michael Ma asked if this kind of antenna siting could be used in agricultural areas. VoiceStream's engineer explained that they hoped to get approximately the same coverage area as the existing Sprint omni-directional antenna, which is approximately one-half mile. He noted that a typical VoiceStream siting covers two to three miles because the panels are higher and the transmission is more powerful. However, this site could only handle two radios compared to six radios at a typical siting. Consequently, this site was limited in the number of calls it could handle at one time. Jane Lawton asked what would happen when this site exceeds the capacity. The engineer stated they would then have to establish another site to serve the greater area.

Motion: Eric Carzon moved the application be recommended. Rey Junquera seconded the motion and it was unanimously approved.

Action Item: Maryland Public Television application to construct a new 445' lattice tower on MDOT property at the truck weigh station at Southbound I-270 in Clarksburg (Application #200109-04).

Bob Hunnicutt summarized the application. He noted that the Park and Planning Commission had requested that the State comply with Mandatory Referral requirements and go through the TTFCG review process prior to holding a Park and Planning Commission hearing on the new tower.

Mr. Hunnicutt stated that several weeks ago, he, Lee Afflerbach, Jane Lawton, Carl Morgan of Nancy Dacek's office, and Judy Daniels of the Park and Planning Commission met at Maryland Public Television (MPT) with representatives of MPT and a number of State agencies. At the time the State filed an application with the TTFCG. The Tower Coordinator had requested, and subsequently received, additional information from the State.

He stated that the State's primary justification for this new tower was that MPT needs to site new antennas for its digital television broadcast. He said that in its initial submission, the State included

excerpts from an MPT Digital Television Plan, which stated that the existing tower could be modified to accommodate the digital antennas. He stated that a subsequent submission from different engineers stated that the existing tower could only be modified to accommodate side-mounted antennas but could not be modified to mount the antennas at the top of the tower, which MPT claims is needed to better serve the down county areas. Mr. Hunnicutt explained that MPT transmits the same programming over six different transmitters across the State. In response to the Tower Coordinator's questions, the State submitted propagation maps which showed that the down county areas were already adequately covered by the State's Annapolis transmitter. Mr. Hunnicutt said that the State also based its need for this new tower as a means to accommodate additional antennas from a number of State agencies. He noted that in its initial submission, the State provided a loading analysis showing a variety of antenna attachments at different elevations on the tower. He had asked the State to identify the agencies associated with each of the antennas and explain where those antennas were presently located. In its response, the State submitted a second table which showed a typical loading on another existing State tower at the College Park Barracks. He noted that some of the antennas were identified as belonging to current State agency's but others were designated for future antennas, if needed. Mr. Hunnicutt stated that for new towers, the Tower Coordinator is to first identify the need for the new tower and then determine if there are existing structures the antennas could be attached to in lieu of the new tower. In that regard, the Tower Coordinator found the following: 1) it appeared that the existing State tower could be used with modification; 2) that the other antennas proposed for attachment to this site were already operating from other sites in the area; 3) that other proposed attachments were speculative; and 4) that the down County area is served from the Annapolis transmitter. Therefore, the Tower Coordinator does not recommend this application.

Michael Ma asked for clarification about the use of the existing tower and the State antennas. Mr. Hunnicutt explained that the first set of documents included plans to use the existing tower which it said could be done with structural modification to support the additional weight of the large digital antennas. A subsequent engineering report made the same analysis, but noted that even with modification, the antennas could not be placed high enough to improve coverage to the down County areas. Lee Afflerbach added that based on the RF propagation models the State provided, the down County area was well served from the Annapolis transmitter.

Mr. Hunnicutt explained the two State tables for proposed antenna sitings on the new tower and noted that much of the proposal was speculative. The actual antennas shown were a consolidation of antennas already attached to other facilities.

Ms. Lawton introduced the State representatives, and offered them time to give the TTFCG any additional information regarding their application.

Bob Sestili, MPT's President and General Manager, summarized the

State's position. He first noted that this was an application from the State of Maryland because MPT was a State agency. He stated that the Department of Budget and Management (DBM) had an obligation for providing statewide public safety antenna sites. He said that this new tower was an effort by the DBM to create space for attachment of numerous State agencies' antennas. He summarized the history of MPT and its original plan to site six transmitters throughout the State to provide service to all Maryland residents. He noted that the analog signals did not presently serve Montgomery County adequately. He stated that they needed to have greater height for the digital service than the current analog antenna positions because the digital signal had different characteristics. He noted that the present tower site is in a valley and the FAA limits the height at that location. He stated they could not file for a digital license from a new site but had to file for one at the present site, which explains MPT's original request to the FCC for a construction permit for the new antenna at the present tower site. He stated that in looking for a site which the State already owned but was at a higher elevation, they found the Truck Weigh Station was the only available site. He stated that they had no money in the budget to acquire new land for another tower.

Mr. Lieberman, the MPT engineer, explained that the FCC required that broadcasters guarantee that their digital signals would replicate their analog signals. He noted that the FCC rules were 50 years old and did not reflect coverage in the real world. He stated that the coverage requirements were based on a statistical model, not empirical information. He stated that MPT was interested in the actual reception experienced by its viewers and not just the expected coverage based on the Longley-Rice propagation model. He stated that the new site would provide better coverage than the existing Frederick tower.

Bob Sestili submitted a new set of maps showing the actual coverage from the Frederick transmitter as compared to coverage to the County from the new transmitter site. He said the maps clearly showed improvements in the level of signal quality to Montgomery County viewers. Lee Afflerbach asked if they had similar maps to submit for coverage to Montgomery County from the Annapolis transmitter. Mr. Sestili and Mr. Lieberman stated they have not generated such maps. Mr. Afflerbach stated that it was important to have comparable data from Annapolis to determine the County coverage.

Michael Ma asked if MPT could add two new smaller towers to serve Montgomery County instead of one very tall tower. Mr. Lieberman explained that they could not obtain a license from the FCC and that the existing tower was ruled out because they could not top-mount the antennas. He added that a new tower at the Frederick site would not attain the desired coverage because it did not provide an increase in elevation, whereas the new site was at a much higher elevation.

Mr. Ma asked if the new tower could accommodate any antennas in addition to those already planned to be attached by the State. Gerrit Veenhof stated that the new tower would be able to accommodate additional antennas of private carriers or other

government agencies, since it would be a stronger, self-supporting lattice tower.

A Darnestown resident noted there were no Clarksburg area residents at the meeting, and he thought it was important for those residents to have input into this application. He asked if the State had discussed this proposal with the Clarksburg area residents. Mr. Veenhof explained that the State would be holding a public hearing prior to construction of the tower.

Jane Lawton added that some of the residents were aware of the proposal because they had been in contact with Nancy Dacek's office, and she was sure that Ms. Dacek's staff would keep them informed of the activity on this project. Ms. Lawton asked how much land the Department of Natural Resources (DNR) owned where the existing Frederick tower is located. The State representatives stated they did not know.

Pat Hanehan asked if the other State agencies' antennas could be added to the existing Frederick tower. A representative from the Department of Public Works stated that they presently operate omni-directional antennas for a mobile (vehicular) radio network which only provides coverage to State Highway vehicles. He noted that when the work crews and snow plow drivers are out of their vehicles they cannot be contacted on the radio, and they cannot afford to pay a person to stay in the vehicle just to listen to the radio. Consequently, he stated that they have decided to provide portable radios for highway personnel to take with them when they leave their vehicles so they would be more readily accessible by radio contact. He stated that they are establishing new low-band radio transmitters that need to be placed at more locations in the area, in addition to the Frederick tower, to provide adequate portable radio services. He stated that the new tower permits the portable service to be activated. He added that the State cannot afford to place the antennas on existing towers owned and operated by others because of the lease costs, which are not in the State Highway budget. He added that there were also issues related to site access because the State needed to have continuous access to its transmitters.

Pat Hanehan asked if the State would consider using the new County towers recently erected for the 800 MHz system at the MCCF and the Germantown Campus of Montgomery College. The State Highway representative stated they planned to use those facilities in addition to the new tower at the Truck Weigh Station.

Mr. Veenhof added that the State's new digital microwave system required the new tower for the increased antenna elevation as well as the strength to accommodate the larger antennas, which could not be attached to the Frederick tower. In response to follow-up questions, Mr. Veenhof stated that, technically speaking, the new digital microwave antennas could be placed on a new tower at the Frederick site as long as the new tower was structurally capable of supporting their weight. Mr. Sestili added that another advantage of the new tower at the Truck Weigh Station was the significant increase in land elevation, approximately 90'. Pat Hanehan noted that the documentation provided by the State showed the difference in elevation between

the existing and proposed site as only 37', not 90' as Mr. Sestili had claimed. Mr. Hanehan noted that, to him, that was not a significant difference. When questioned, Mr. Sestili did not know which elevation was correct. Mr. Hanehan stated he believed it was important for the TTFCG to understand whether there was or was not a significant difference in elevation between the two locations.

A resident asked if the Tower Coordinator had looked at the Emergency Alert System (EAS) requirements for MPT, because he knew they were different for Annapolis and Frederick. Mr. Hunnicutt replied that they were only looking at the coverage issues and alternative sites and that EAS, which is controlled by the State, was not part of their review. Mr. Afflerbach added that the focus was mainly on the fact that the documentation submitted showed that Annapolis adequately provided coverage to the County.

Eric Carzon asked for clarification from Mr. Sestili and the State engineer that once the sites were selected by MPT, were they locked into those sites and could not select others. The State replied that in effect, that was true because the other licenses were already issued and the State could not obtain another license for another tower facility in Montgomery County.

Jane Lawton commented that if the State had involved the County earlier in the planning process it could have looked more closely at using alternative sites. However, at this point, she noted other alternative sites had already been ruled out for various reasons.

Eric Carzon stated that in not recommending this application, it appeared to him that the TTFCG may be asking the State to accept an inferior coverage location. He stated that this was analogous to recent citizen requests for carriers to provide a less-than-acceptable level of service in a particular area - a condition which he did not believe was appropriate. He noted that there was a public benefit to the placement of these antennas so they could provide the best service level possible.

Jane Lawton replied that an alternative location would not necessarily mean that the service would be worse, but only that the area is already covered by the Annapolis transmitter. She stated that if the State did construct a new tower at the present site, but FAA limitations prove it to be an inferior option, she agreed it was best to have a better solution for future communications needs. Pat Hanehan agreed it is in the public good to see clear pictures, regardless of where they originate, but if the Tower Coordinator believes that the area is already covered by Annapolis, the public good is already being met.

Mr. Sestili noted that eventually the analog signals would be eliminated and that the remaining digital signals could, at some point in the future, be providing different programming to different parts of the State.

Eric Carzon stated he would defer to his colleagues, who wanted to have additional information provided to the TTFCG, although he



was ready to recommend the application at today's meeting.

Rey Junquera stated that if the TTFCG could meet again before the Park and Planning Commission's Mandatory Referral hearing, he would agree that it would be helpful to have the additional information requested by the engineers and Mr. Hanehan.

Michael Ma added that he thought it would be very useful for the TTFCG to conduct as thorough a review as possible to answer all of the technical questions before the application comes before the Park and Planning Commission. He stated if that was done, it would make the hearing at the Park and Planning Commission easier to focus just on land use issues and not the technical issues. He also thought it was important that the hearing at the Park and Planning Commission focus on public input because that is also a purpose of that hearing.

In response to questions, Gerrit Veenhof stated that the State would normally conduct at least one County hearing, and more if required.

Motion: Pat Hanehan moved that the application be tabled pending receipt of additional information. Michael Ma seconded the motion.

A tentative TTFCG meeting for December 4th was scheduled to review additional information from MPT including: 1) signal strength propagation maps from the Annapolis transmitter in its current configuration and as proposed with a new Annapolis tower at a higher elevation; 2) clarification regarding the elevation differences between the existing and proposed sites; and 3) how much land DNR owned in Frederick County which could be used as an alternative location for a new tower.

The TTFCG also requested that at the December 4 meeting, the Tower Coordinator review any applications which would have been reviewed at the regularly scheduled meeting of December 12, and cancel the December 12 meeting.

The next meeting of the TTFCG is scheduled for Wednesday, December 12, 2001 at 10:00 a.m. in the 2nd floor conference room #225 of the COB.